AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 68. (Canceled)

69. (Currently Amended) A catheter for delivering an aerosol of medicine to a patient comprising:

a catheter shaft having a proximal end and a distal end, wherein the distal end forms a j-shape ~~of the catheter shaft curving away from a longitudinal axis of the catheter shaft~~;

a lumen extending through the catheter shaft and adapted at a proximal end for receiving a medicine and communicating at the distal end with a distal medicine orifice from which the medicine is discharged in a direction toward the proximal end of the catheter shaft; and

means for nebulizing the medicine discharged at the distal orifice into an aerosol plume of particles of the medicine.

70. (Previously Presented) The catheter of claim 69, wherein the nebulizing means comprises at least one additional lumen, the at least one additional lumen configured to carry a gas and communicating with a distal gas orifice aligned to cooperate with the distal medicine orifice to generate the aerosol plume of particles of medicine.

71. (Currently Amended) The catheter of claim 69[[98]], wherein the j-shape formed at the distal end of the catheter shaft is configured to deliver the aerosol plume of particles toward tissue walls in a patient when the catheter is positioned in the[[a]] patient.

72. (Previously Presented) The catheter of claim 71, wherein the tissue walls comprise airway passage walls.

73. (Previously Presented) The catheter of claim 69, wherein the catheter shaft is configured for placement in the patient's lungs.

74. (Previously Presented) The catheter of claim 69, wherein at least a portion of the catheter is constructed of a compliant material.

75. – 80. (Canceled)

81. (Currently Amended) The catheter system of claim 101[[105]], further comprising a second gas lumen extending through the catheter shaft and communicating with a second distal gas orifice, the second distal gas orifice oriented in a manner to deliver a gas to slow the discharge of nebulized liquid.

82. (Previously Presented) The catheter system of claim 81, wherein the second distal gas orifice is oriented in a direction substantially parallel to a longitudinal axis of the catheter shaft.

83. (Previously Presented) The catheter system of claim 81, wherein the second distal gas orifice faces the distal gas orifice.

84. (Previously Presented) The catheter system of claim 81, wherein the second distal gas orifice faces the distal liquid orifice.

85. (Previously Presented) The catheter system of claim 103, further comprising an endotracheal tube, wherein at least a portion of the catheter shaft is positioned within the endotracheal tube.

86. (Previously Presented) The catheter system of Claim 103 further comprising:

graduated markings on the catheter shaft.

87. (Previously Presented) The catheter system of Claim 103 further comprising:

luer lock connectors on proximal ports communicating with the gas lumen and the liquid lumen.

88. (Previously Presented) The catheter system of Claim 103 further comprising:

a stripe on the catheter shaft.

89. (Previously Presented) The catheter system of claim 103, wherein the catheter shaft is configured for placement in the patient's lungs.

90. (Previously Presented) The catheter system of claim 103, wherein at least a portion of the catheter is constructed of a compliant material.

91. (Previously Presented) A catheter for delivering an aerosol of medicine to a patient comprising:

a catheter shaft having a proximal end and a distal end;

a liquid lumen located in the shaft and adapted for conveying a medicine in liquid form;

a gas lumen located adjacent the liquid lumen and adapted for conveying a gas;

a distal liquid orifice communicating with the liquid lumen; and

a distal gas orifice communicating with the gas lumen, wherein the distal gas orifice and the distal liquid orifice are aligned to generate a discharge of nebulized liquid;

wherein the distal end of the catheter shaft is maintained in a j-shape orientation having the distal liquid orifice and the distal gas orifice pointing substantially towards a proximal end of the catheter, the j-shaped orientation maintained by a support member attached to the catheter shaft.

92. (Previously Presented) The catheter of claim 91, wherein the catheter shaft comprises an extruded polymer tubing.

93. (Previously Presented) The catheter of claim 91 wherein the support member comprises a tether.

94. (Previously Presented) The catheter of claim 93 wherein a first end of the tether is attached to the catheter shaft at a first attachment point adjacent

the distal end and a second end of the tether is attached to the catheter shaft at a position along the catheter shaft between the proximal end and the first attachment point.

95. (Previously Presented) The catheter of claim 92, wherein the tether comprises a wire.

96. (Previously Presented) The catheter of claim 91, wherein the catheter shaft is configured for placement in the patient's lungs.

97. (Previously Presented) The catheter of claim 91, wherein at least a portion of the catheter is constructed of a compliant material.

98. (Canceled)

99. (Previously Presented) The catheter of claim 69, wherein the medicine comprises a liquid.

100. (Previously Presented) The catheter of claim 69, wherein the nebulizing means comprises a plurality of gas lumens, each of the plurality of gas lumens configured to carry a gas and communicating with a respective distal gas orifice, wherein the distal gas orifices are aligned to cooperate with the distal medicine orifice to generate the aerosol plume of particles of medicine.

101. (Currently Amended) A catheter system for delivering an aerosol to a patient comprising:

a catheter shaft having a proximal end and a distal end, the distal end for insertion into the patient, wherein the distal end comprises a j-shape;

at least one lumen extending through the catheter shaft, the at least one lumen defining a distal orifice, the distal orifice located at the distal end of the catheter shaft; and

wherein the distal orifice is aligned to generate a discharge of nebulized medicine in a direction toward the proximal end of the catheter shaft.

102. (Previously Presented) The catheter system of claim 101, wherein the medicine comprises a liquid.

103. (Currently Amended) The catheter system of claim 102[[101]], wherein the at least one lumen comprises:

a gas lumen extending through the catheter shaft, the gas lumen defining a distal gas orifice in communication with the gas lumen, the distal gas orifice located at the distal end of said catheter shaft;

a liquid lumen extending along at least a portion of the catheter shaft, the liquid lumen defining a distal liquid orifice in communication with the liquid lumen, the distal liquid orifice located at the distal end of said catheter shaft; and

wherein the distal gas orifice and the distal liquid orifice are aligned to generate the discharge of nebulized liquid in the direction toward the proximal end of the catheter shaft.

104. – 105. (Canceled)

106. (Currently Amended) The catheter system of claim 101 [[105]], wherein the j-shape is configured to deliver nebulized medicine toward tissue walls in a patient when the catheter is positioned in a patient.

107. (Previously Presented) The catheter system of claim 106, wherein the tissue walls comprise airway passage walls.

108. (Currently Amended) The catheter system of claim 103, wherein the catheter shaft comprises an extruded polymer tubing.

109. (New) A catheter for delivering an aerosol of medicine to a patient comprising:

a catheter shaft having a proximal end and a distal end, the distal end of the catheter shaft curving away from a longitudinal axis of the catheter shaft;

a lumen extending through the catheter shaft and adapted at a proximal end for receiving a medicine and communicating at the distal end with a distal medicine orifice from which the medicine is discharged in a direction toward the proximal end of the catheter shaft; and

a plurality of gas lumens, each of the plurality of gas lumens configured to carry a gas and communicating with a respective distal gas orifice, wherein the distal gas orifices are aligned to cooperate with the distal medicine orifice to generate an aerosol plume of particles of the medicine.

110. (New) The catheter of claim 109, wherein the medicine comprises a liquid.

111. (New) The catheter of claim 109, wherein the distal end of the catheter shaft is configured to deliver the aerosol plume of particles toward tissue walls in a patient when the catheter is positioned in the patient.

112. (New) The catheter of claim 111, wherein the tissue walls comprise airway passage walls.

113. (New) The catheter of claim 109, wherein the catheter shaft is configured for placement in the patient's lungs.

114. (New) The catheter of claim 109, wherein at least a portion of the catheter is constructed of a compliant material.

115. (New) A catheter system for delivering an aerosol to a patient comprising:

a catheter shaft having a proximal end and a distal end, the distal end for insertion into the patient;

a gas lumen extending through the catheter shaft, the gas lumen defining a distal gas orifice in communication with the gas lumen, the distal gas orifice located at the distal end of the catheter shaft;

a liquid lumen extending along at least a portion of the catheter shaft, the liquid lumen defining a distal liquid orifice in communication with the

liquid lumen, the distal liquid orifice located at the distal end of the catheter shaft; and

wherein the distal gas orifice and the distal liquid orifice are aligned to generate a discharge of nebulized liquid in the direction toward the proximal end of the catheter shaft.

116. (New) The catheter system of claim 115, wherein the distal end of the catheter shaft comprises a curved shape.

117. (New) The catheter system of claim 116, wherein the curved shape is configured to deliver nebulized medicine toward tissue walls in a patient when the catheter is positioned in a patient.

118. (New) The catheter system of claim 117, wherein the tissue walls comprise airway passage walls.

119. (New) The catheter of claim 115, wherein the catheter shaft comprises an extruded polymer tubing.